CLAIMS

What is claimed is:

1. A process for detecting a nucleic acid of interest in at least one sample, the process comprising:

administering the at least one sample to a solid carrier capable of absorbing the at least one sample;

drying the solid carrier;

extracting a representative part of the at least one sample from the solid carrier with a nucleic acid isolation solution; and

detecting the nucleic acid of interest, if present, in the representative part of the at least one sample.

2. A process for detecting and quantifying a nucleic acid of interest in at least one sample, the process comprising:

administering the at least one sample to a solid carrier capable of absorbing the at least one sample;

drying the solid carrier;

extracting a representative part of the at least one sample from the solid carrier with a nucleic acid isolation solution;

detecting the nucleic acid of interest, if present, in the representative part of the at least one sample; and

quantifying the nucleic acid of interest in the at least one sample.

3. The process according to claim 1 or 2, wherein at least 100 µl of the at least one sample is administered to the solid carrier.

4. The process according to claim 3, wherein at least 250 µl of the at least one sample is administered to the solid carrier.

5. The process according to any one of claims 1-4, further comprising identifying the nucleic acid of interest.

6. The process according to any one of claims 1-5, wherein at least two samples are administered to the solid carrier.

7. The process according to any one of claims 1-6, further comprising administering a known amount of a reference nucleic acid to the solid carrier.

8. The process according to any one of claims 1-7, wherein the representative part of the solid carrier comprises the whole of the at least one sample.

9. The process according to any one of claims 1-8, wherein the representative part of the solid carrier comprises the whole of the solid carrier.

10. The process according to claim 6 or 7, wherein the representative part of the solid carrier comprises one of the at least one samples.

11. The process according to any one of claims 1-10, wherein the nucleic acid isolation solution comprises a chaotropic nucleic acid isolation lysis buffer.

12. The process according to any one of claims 1-11, wherein the nucleic acid of interest comprises RNA.

13. The process according to claim 12, wherein the RNA is selected from the group consisting of mitochondrial RNA, viral RNA, messenger RNA, and combinations of any thereof.

14. The process according to any one of claims 1-13, wherein the nucleic acid of interest is of a viral origin.

15. The process according to claim 14, wherein the viral nucleic acid comprises a retroviral nucleic acid.

16. The process according to claim 13 or 14, wherein the viral RNA comprises at least one of HIV or HTLV.

17. The process according to any one of claims 13-16, wherein the viral RNA comprises HIV-1.

18. The process according to any one of claims 1-17, wherein the solid carrier comprises filter-paper.

19. The process according to any one of claim 1-18, further comprising genotyping a mutant from which the nucleic acid of interest originates.

20. The process according to any one of claims 1-19, wherein the at least one sample comprises a precious bodily fluid.

21. The process according to any one of claims 1-20, wherein the at least one sample is selected from the group consisting of blood, plasma, mothers milk, sputum, liquor, saliva, urine, and combinations of any thereof.

22. The process according to any one of claims 1-21, wherein the at least one sample comprises a droplet of whole blood.

23. The process according to any one of claims 1-21, wherein the at least one sample is a plasma sample.

24. The process according to any one of claims 1-23, wherein detecting or quantifying the nucleic acid comprises amplifying the nucleic acid.

25. The process according to claim 24, wherein amplifying the nucleic acid comprises real-time monitored amplification.

26. The process according to any one of claims 1-25, wherein detecting or quantifying the nucleic acid is performed with an end-point read-out system.

27. The process according to any one of claims 1-26, further comprising determining a ratio between different nucleic acids, if present, in the at least one sample

28. A dried solid carrier for detecting, identifying, and/or quantifying a nucleic acid of interest, comprising:

a sample suspected of including the nucleic acid of interest.

29. The dried solid carrier of claim 28, wherein the sample comprises 100 µl of dried blood or a derivative thereof.

30. A kit for detecting, identifying and/or quantifying a nucleic acid of interest in a sample, comprising:

a solid carrier capable of, at least, absorbing the sample; and

a nucleic acid isolation solution.

31. The kit of claim 30, further comprising a means for amplifying the nucleic acid of interest.

32. A solid carrier, comprising:

at least one sample comprising about 500 µl of dried blood or a derivative thereof.

33. The solid carrier of claim 32, further comprising at least two samples.

34. The solid carrier of claim 32 or 33, further comprising a series of samples, wherein each sample of the series of samples is obtained at different data points.

35. The solid carrier of anyone of claims 32-34, further comprising a known amount of a reference nucleic acid.